Anatomy of a Patent
Setting the Stage

What’s inside the black box?
Objectives

To become more familiar with the following:

• What a United States Patent is
• Types of Patents
• Parts of a United States Utility Patent
• Parts of an Application for a United States Utility Patent
What IS a United States Patent?

A U.S. patent is:

• a property right
• granted by the Government of the United States of America
• to an inventor
• to exclude others from making, using, offering for sale, or selling the invention
• throughout the United States or importing the invention into the United States for a limited time
• in exchange for public disclosure of the invention when the patent is granted.
Types of U.S. Patents

- **Utility Patent**: any new and useful process, article of manufacture, machine, or composition; or an improvement of any of these

- **Design Patents**: a new original, and ornamental design for an article of manufacture

- **Plant Patents**: any distinct and new variety of plant that is invented or discovered and asexually reproduced, (e.g., from cuttings or from cell culture, not from seeds).
IP Awareness Assessment Tool
Utility Patents

Any new and useful process, article of manufacture, machine, or composition; or an improvement of any of these.
Effective Term of a Utility Patent
From patent grant date until 20 years from initial filing (including domestic benefit claims) - for all applications filed on or after June 8, 1995.

Patents granted on applications filed before June 8, 1995, are entitled to the longer of: 20 years from initial filing, or 17 years from the date the patent issues.

**Note:** No patent can be enforced until *after* it is granted. The words “patent pending” on a product have no legal weight. However, 35 U.S.C. 154(d) does provide for provisional rights for published patent applications that are later patented.
The Specification
The specification should include the following sections in order (as applicable):

(1) Title of the invention

(2) Cross-reference to related applications (unless included in the application data sheet).

(3) Statement regarding federally sponsored research or development.

(4) The names of the parties to a joint research agreement.

(5) Reference to a “Sequence Listing,” a table, or a computer program listing appendix submitted on a compact disc and an incorporation-by-reference of the material on the compact disc (see § 1.52 (e)(5)).

(6) “Statement regarding prior disclosures by the inventor or a joint inventor.”
The Specification (cont)

(7) Background of the invention.

(8) Brief summary of the invention.

(9) Brief description of the several views of the drawing.

(10) Detailed description of the invention.

(11) A claim or claims.

(12) Abstract of the disclosure.

(13) “Sequence Listing,” if on paper (see §§ 1.821 through 1.825).
Example of a Utility Patent
Example of Utility Patent

(12) United States Patent
Parsons et al.

(10) Patent No.: US 8,961,336 B1
(45) Date of Patent: *Feb. 24, 2015

GOLF CLUB HEADS AND METHODS TO MANUFACTURE GOLF CLUB HEADS

Applicant: Parsons Xtreme Golf, LLC, Scottsdale, AZ (US)

Inventors: Robert R. Parsons, Scottsdale, AZ (US); Michael R. Nicole, Scottsdale, AZ (US); Bradley D. Schweigert, Anthem, AZ (US)

Assignee: Parsons Xtreme Golf, LLC, Scottsdale, AZ (US)

Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

Appl. No.: 14/513,073
Filed: Oct. 13, 2014

Related U.S. Application Data
Continuation of application No. 14/498,603, filed on Sep. 26, 2014, which is a continuation-in-part of application No. 29/501,006, filed on Aug. 29, 2014.

Provisional application No. 62/041,538, filed on Aug. 25, 2014.

Int. Cl.
A63B 55/00 (2006.01)
A63B 55/06 (2006.01)
A63B 59/00 (2006.01)

U.S. Cl.
CPC .......... A63B 53/0475 (2013.01); A63B 53/06 (2013.01); A63B 59/0074 (2013.01); A63B 59/0092 (2013.01); A63B 2053/0408 (2013.01); A63B 2053/0491 (2013.01)

References Cited
U.S. PATENT DOCUMENTS
D394,617 S 3,1988 Perkins
4,714,978 A * 7,1988 Sahm ....................... 473/317
3,159,296 A 10,1992 Lee
5,492,560 A 5,1995 Bamberg
6,122,644 S 10,1995 Bough et al.
6,122,644 S 10,1995 Bough et al.
6,122,645 A 10,1995 Brough et al.
6,194,039 A 5,1996 Brough et al.
5,540,437 A 7,1996 Bamberg
5,669,830 A 6,1997 Bamberg
5,769,821 A 6,1998 Humphrey et al.

Primary Examiner — Sebastiano Pasanini

ABSTRACT
Embodiments of golf club heads and methods to manufacture golf club heads are generally described herein. In one example, a golf club head may include a plurality of weight portions and a body portion. The plurality of weight portions may be associated with a total weight portion mass. The body portion may include a face portion, a toe portion, a sole portion, an interior cavity that may extend between the top and sole portions, and a back portion with a plurality of exterior weight ports having a first set of exterior weight ports and a second set of exterior weight ports. Each of the plurality of exterior weight ports is associated with a port diameter and configured to receive at least one weight portion of the plurality of weight portions. Other examples and embodiments may be described and claimed.

20 Claims, 9 Drawing Sheets
“...the name of the game is the claim.”*

- In ALL patents, it is the claim(s) that define the invention that is covered by the patent.

- The specification and drawings serve to support the claims, but protection is limited to what is claimed.

- The body of the patent may include numerous embodiments and elements, but only the subject matter claimed is afforded protection.

- Broadest reasonable interpretation consistent with the specification during examination

*Giles S. Rich, The Extent of the Protection and Interpretation of Claims-American Perspectives, 21 Int'l Rev. Indus. Prop. & Copyright L., 497, 499 (1990) ("To coin a phrase, the name of the game is the claim.")
Anatomy of a Claim

A claim in a Utility application or patent has three (3) main parts

– A **preamble** or the introduction;

– A **transitional phrase** of:
  • comprising (open);
  • consisting essentially of (excludes materials that materially affect the basic and novel characteristics of the invention); and
  • consisting of (closed); and

– A **body** reciting the elements of the invention.
Product Claim Example

Claim 1. A chair **comprising**:

- a flat top; and

- a plurality of legs attached to one side of the top.

What are the parts of the claim?

- The **Preamble** of claim: “A chair”.
- The **Transitional phrase** of the claim: “comprising”.
- The **Body** of the claim: “a flat top; and a plurality of legs attached to one side of the top.”
Claim 1. A method of repairing at least one defective area in at least one stoving lacquer coating consisting of the steps of:

(a) applying a powder coating composition directly to at least one defective area, wherein said powder coating composition has a mean particle size ranging from about 1 to about 90 micrometers; and

(b) melting and curing the powder coating composition by irradiation.
How to Read a Patent: Claims

13 Claims, 2 Drawing Sheets

1. A one-piece carrier strap for carrying a pair of containers, such as jugs, narrow-necked bottles or the like, that are of a type having an enlarged neck portion, said strap comprising:
   (a) an elongate grip having a pair of opposite ends;
   (b) a pair of rings, each ring being fixedly attached to a respective one of said ends of said grip, each ring having a pair of scores formed therein; and
   (c) a respective neck-retaining collar within each ring, each collar having at least a pair of resiliently yieldable portions that progressively approach each other toward an upper side of said strap for yieldably receiving and springingly retaining the enlarged neck portion of a respective container of said type that is inserted through said collar toward said upper side, said yieldable portions of each collar being, apart from the corresponding ring, completely separated from each other by at least a pair of gaps such that if either ring is stressed and thereby broken along said scores, then at least a pair of the corresponding yieldable portions are fully disconnected from each other.

• Scope of protection is defined by the claims!
Example of an Independent Device Claim

1. A one-piece carrier strap for carrying a pair of containers, such as jugs, narrow-necked bottles or the like, that are of a type having an enlarged neck portion, said strap comprising:

   (a) an elongate grip having a pair of opposite ends;
   (b) a pair of rings, each ring being fixedly attached to a respective one of said ends of said grip, each ring having a pair of scores formed therein; and
   (c) a respective neck-retaining collar within each ring, each collar having at least a pair of resiliently yieldable portions that progressively approach each other toward an upper side of said strap for yieldably receiving and springably retaining the enlarged neck portion of a respective container of said type that is inserted through said collar toward said upper side, said yieldable portions of each collar being, apart from the corresponding ring, completely separated from each other by at least a pair of gaps such that if either ring is stressed and thereby broken along said scores, then at least a pair of the corresponding yieldable portions are fully disconnected from each other.
Examples of Dependent Claims

A dependent claim incorporates by reference all the limitations of the claim to which it refers.

3. The carrier strap of claim 1 wherein each ring includes a tab portion infrangibly attached to the exterior circumference of said ring.

4. The carrier strap of claim 1 wherein said grip further includes longitudinal ribs so formed as to provide substantial rigidity to said grip, said ribs being formed at least in part, along said upper side of said strap.

5. The carrier strap of claim 1 wherein said at least a pair of corresponding yieldable portions are fully disconnected from each other in such a manner that the corresponding said collar is subsequently incapable of springingly retaining the enlarged neck portion of a container of said type.
Example of Design Patent

United States Design Patent
Schweigert

GOLF CLUB HEAD

Applicant: Parsons Xtreme Golf, LLC, Scottsdale, AZ (US)

Inventor: Bradley D. Schweigert, Anthem, AZ (US)

Assignee: Parsons Xtreme Golf, LLC, Scottsdale, AZ (US)

Term: 14 Years

Filed: Sep. 30, 2014

LOC (10) CL ............................ 21-02

U.S. CL
USPC ................................. D21/743

Field of Classification Search
CPC .................................. A63B 55/065; A63B 55/0487
USPC .............................. D21/736-746, 759

See application file for complete search history.

References Cited

U.S. PATENT DOCUMENTS

D361,011 S * 10/1995 Sturm .............. D21/746
D365,864 S * 1/1995 Sturm .............. D21/746
5,489,007 A * 2/1996 Simmons
D369,751 S 4/1996 Ride
D378,688 S 4/1997 Cameron
5,683,307 A 11/1997 Ride

(Continued)

OTHER PUBLICATIONS


Primary Examiner — Mitchell Siegel

CLAIM

The ornamental design for a golf club head, as shown and described.

DESCRIPTION

FIG. 1 is a top perspective view of a golf club head;
FIG. 2 is a bottom perspective view of the golf club head of FIG. 1;
FIG. 3 is a front elevational view of the golf club head of FIG. 1;
FIG. 4 is a rear elevational view of the golf club head of FIG. 1;
FIG. 5 is a top view of the golf club head of FIG. 1;
FIG. 6 is a bottom view of the golf club head of FIG. 1;
FIG. 7 is a left side view of the golf club head of FIG. 1;
FIG. 8 is a right side view of the golf club head of FIG. 1;
FIG. 9 is a top perspective view of another golf club head;
FIG. 10 is a bottom perspective view of the golf club head of FIG. 9;
FIG. 11 is a front elevational view of the golf club head of FIG. 9;
FIG. 12 is a rear elevational view of the golf club head of FIG. 9;
FIG. 13 is a top view of the golf club head of FIG. 9;
FIG. 14 is a bottom view of the golf club head of FIG. 9;
FIG. 15 is a left side view of the golf club head of FIG. 9, and;
FIG. 16 is a right side view of the golf club head of FIG. 9.

The broken lines connecting the solid lines represent the bounds of the claim. The remaining broken lines illustrate the environment. None of the broken lines forms part of the claimed design.

1 Claim, 8 Drawing Sheets
Example of Design Patent

• Notice that this design patent is drawn to a similar invention as the utility patent we looked at. The big difference, is that the design patent only covers what the invention looks like, and has only a single claim.

• The front page includes the claim and a description of the drawings.

• The entire patent is the front page and the drawings.

• Patent term is
  – 15 years from date of issue if filed on or after May 13, 2015.
  – 14 years from date of issue if filed before May 13, 2015
Plant Patents

- Plant patents are granted for any distinct and new variety of plant (newly discovered or invented) that is asexually reproduced. (Example: hybrid rose with new color intensity in flower)

- “Asexually reproduced” means plants must be produced by means other than seeds, such as by the rooting of cuttings, layering, budding, or grafting - this is required so all of a given plant are genetically identical.

- The specification is a description of the plant itself and must include pictures. All colors must be described by reference to a commercial standard.

- The plant patent is granted on entire plant, so only one claim is permitted.
TITLE: Avocado tree named `Mendez No. 1`

ABSTRACT:
A new and distinct variety of an avocado tree having many characteristics similar to those of `Hass` that is characterized by profuse blooming six to seven months earlier than the `Hass` avocado tree and bearing fruit that is mature earlier during the season than `Hass` fruit.

CLAIMS: (found at end of patent, as for a Utility patent.)
What is claimed is:
1. A new and distinct variety of avocado tree named Mendez No. 1, as herein described and illustrated.
Example of Plant Patent

In this patent, the patented avocado has increased frost tolerance compared to a Haas avocado—see third picture—Haas tree on left, Mendez No. 1 on right (after frost).
What Are the Parts of a U.S. Patent?

Each patent must have the following parts:

• Title
• Abstract
• Drawings or pictures if necessary to describe the invention
• A specification, including a description of the invention, and
• At least one claim.

Other requirements vary by type of patent, and subject matter.
The Application

The application for patent should contain the following, as applicable:

(1) Utility application transmittal form.
(2) Fee transmittal form.
(3) Application data sheet (see § 1.76) (recommended).
(4) Executed oath or declaration (not needed until patent is allowed).
(5) Specification
(6) Drawings if applicable

See MPEP 608.01(a) and 37 C.F.R. 1.77
Patent Forms
http://www.uspto.gov/forms/aia_forms.jsp

• Find all patent forms on USPTO web site
  – For **general assistance** in completing the patent forms below or to request paper copies of the forms, contact **General Information Services Division at 1-800-786-9199 (1-800-PTO-9199) or 571-272-1000, and select option 2**.
  – All forms provided in Adobe Acrobat

Exemplary list:

<table>
<thead>
<tr>
<th>Form</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA1.1</td>
<td>Notice of Appeal</td>
</tr>
<tr>
<td>PA2.1</td>
<td>Request for Oral Hearing Before the Patent Trial and Appeal Board</td>
</tr>
<tr>
<td>PA3.1</td>
<td>Pre-Appearance Brief Request for Review (more information)</td>
</tr>
<tr>
<td>PA3.2</td>
<td>Request for Transcript of Appeal Forwarding Fee (more information)</td>
</tr>
<tr>
<td>AppData</td>
<td>Application Data Sheet (37 CFR 1.76) (exempt from $50)</td>
</tr>
<tr>
<td>Sit</td>
<td>Certificate of Mailing under 37 CFR 1.8</td>
</tr>
<tr>
<td>Sit</td>
<td>Certificate of Transmission under 37 CFR 1.8</td>
</tr>
<tr>
<td>CRN</td>
<td>Request for Customer Number Data Change</td>
</tr>
<tr>
<td>CRN</td>
<td>Request for Customer Number</td>
</tr>
<tr>
<td>ExpressAbn</td>
<td>Express Abandonment Under 37 CFR 1.138</td>
</tr>
<tr>
<td>ExpressAbn</td>
<td>Petition for Express Abandonment to Avoid Publication Under 37 CFR 1.135(c)</td>
</tr>
<tr>
<td>ExpressAbn</td>
<td>Petition for Express Abandonment to Obtain a Refund</td>
</tr>
<tr>
<td>ExpFormApp</td>
<td>Certification and Request for Extended Missing Parts Pilot Program</td>
</tr>
<tr>
<td>ExpFormApp</td>
<td>Certification and Request for Extended Missing Parts Pilot Program</td>
</tr>
<tr>
<td>ExpFormApp</td>
<td>Credit Card Payment Form and Instructions</td>
</tr>
<tr>
<td>ExpFormApp</td>
<td>Patent Application Fee Determination Record</td>
</tr>
<tr>
<td>ExpFormApp</td>
<td>Multiple Dependent Claim Fee Calculation Sheet</td>
</tr>
<tr>
<td>ExpFormApp</td>
<td>Certification of Mini Entity Status - Gross Income Basis (Gross Income Limit (See 37 CFR 1.156 and 37 CFR 1.157))</td>
</tr>
<tr>
<td>ExpFormApp</td>
<td>Certification of Mini Entity Status - Institution of Higher Education Basis (See 37 CFR 1.156 and 37 CFR 1.157)</td>
</tr>
<tr>
<td>ExpFormApp</td>
<td>Fee Transmittal</td>
</tr>
<tr>
<td>ExpFormApp</td>
<td>Processing Fee Under 37 CFR 1.170 Transmittal</td>
</tr>
<tr>
<td>ExpFormApp</td>
<td>Patent Fee Under 37 CFR 1.170, (g) &amp; (v) Transmittal</td>
</tr>
<tr>
<td>ExpFormApp</td>
<td>Maintenance Fee Transmittal</td>
</tr>
<tr>
<td>ExpFormApp</td>
<td>Reissue Application Fee Transmittal</td>
</tr>
<tr>
<td>ExpFormApp</td>
<td>Deposit Account Order Form</td>
</tr>
</tbody>
</table>
Patent Fees
http://www.uspto.gov/web/offices/ac/qs/ope/fee010114.htm

- All patent fees available on USPTO web site
  - Be certain to always check for “current fee schedule”
  - Many fees broken into large entity/small entity/micro entity payments

<table>
<thead>
<tr>
<th>Fee Code</th>
<th>All Code</th>
<th>Description</th>
<th>Small Entity Fee</th>
<th>Micro Entity Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>100000111</td>
<td>1.95(a)</td>
<td>Basic filing fee - utility (paper filing — also requires non-electronic filing fee under 1.10(b))</td>
<td>200.00</td>
<td>150.00</td>
</tr>
<tr>
<td>100000100</td>
<td>1.95(a)</td>
<td>Basic filing fee - utility (electronic filing)</td>
<td>200.00</td>
<td>150.00</td>
</tr>
<tr>
<td>100000105</td>
<td>1.95(h)</td>
<td>Utilization fee - design</td>
<td>100.00</td>
<td>75.00</td>
</tr>
<tr>
<td>100000106</td>
<td>1.95(h)</td>
<td>Basic filing fee - design (DRIs)</td>
<td>100.00</td>
<td>75.00</td>
</tr>
<tr>
<td>100000103</td>
<td>1.95(h)</td>
<td>Basic filing fee - Plant</td>
<td>100.00</td>
<td>75.00</td>
</tr>
<tr>
<td>100000102</td>
<td>1.95(h)</td>
<td>Provisional application filing fee</td>
<td>100.00</td>
<td>75.00</td>
</tr>
<tr>
<td>100000104</td>
<td>1.95(h)</td>
<td>Basic filing fee - Micro</td>
<td>100.00</td>
<td>75.00</td>
</tr>
<tr>
<td>100000108</td>
<td>1.95(h)</td>
<td>Basic filing fee - Micro (DRIs)</td>
<td>100.00</td>
<td>75.00</td>
</tr>
<tr>
<td>100000101</td>
<td>1.95(d)</td>
<td>Search fee - Non-Filing fee, search fee, examination fee or oath or declaration, or application filed without oath or declaration or by reference</td>
<td>150.00</td>
<td>112.50</td>
</tr>
<tr>
<td>100000100</td>
<td>1.95(j)</td>
<td>First page - Application filing fee, search fee, examination fee or oath or declaration, or application filed without oath or declaration or by reference</td>
<td>150.00</td>
<td>112.50</td>
</tr>
<tr>
<td>100000102</td>
<td>1.95(j)</td>
<td>First page - Provisional filing fee, search fee, examination fee or oath or declaration, or application filed without oath or declaration or by reference</td>
<td>150.00</td>
<td>112.50</td>
</tr>
<tr>
<td>100000104</td>
<td>1.95(j)</td>
<td>Extended claims or excess of claims</td>
<td>150.00</td>
<td>112.50</td>
</tr>
<tr>
<td>100000108</td>
<td>1.95(k)</td>
<td>Claims in excess of 20</td>
<td>150.00</td>
<td>112.50</td>
</tr>
</tbody>
</table>

Example of fee schedule:
### Basic Fees

#### Utility
- Basic filing fee
  - $280/$140/$70
- Search Fee
  - $600/$300/$150
- Examination fee
  - $720/$360/$180
- Issue
  - $960/$480/$240

#### Design
- Basic filing fee
  - $180/$90/$45
- Search fee
  - $120/$60/$30
- Examination
  - $460/$230/$115
- Issue
  - $560/$280/$140

**Provisional Application Filing Fee:** $260/$130/$65
What Other Types of Applications or Patents Are There?
Types of U.S. Patents

In addition, there are other documents that are patent-related, but do not confer patent rights:

• Provisional Patent Applications

• PCT (Patent Cooperation Treaty) Applications
Benefits of a provisional

- Provisional application is a “placeholder”
- Good for one year from filing
- Test the waters
- Patent Pending (for the duration of the year)
- Inexpensive ($260/$130/$65)
Cautions of a provisional

• Starts the clock ticking
• Subject matter must carry over to gain the benefit in the non-provisional
• Must have at least one inventor in common
• Amendments are not permitted in provisional applications after filing
Provisional Patent Application Requirements

Law Requires:
• Clear indication that applicant is filing a provisional application
• Fee
• Description of the invention must enable someone to make and use the invention
• Drawing if necessary to understand the invention
Provisional Patent Application

Take Aways

• Provisional applications are not patents
• The Office does not examine them
• They are good for 1 year
• Allows you to test the water
• “Patent pending” for that one year
• Must plan to file within the year to claim the benefit of the earliest filing date
The Patent Cooperation Treaty

• A United Nations Treaty
  – administered by the International Bureau (IB)
    • of the World Intellectual Property Organization (WIPO) in Geneva, Switzerland
• An international application (IA) is filed under the PCT but...
  – there is no “international patent”
  – the PCT functions as a patent application filing system
  – the IA must still be prosecuted in each individual national or regional office where patent protection is desired
Two Phases of the PCT

• **International phase**
  – Known as an International Application
  – Chapter I (mandatory)
  – Chapter II (optional)

• **National phase (stage)**
  – that designates the United States is a U.S. application as of the international filing date.
The International Application

• A single application
  – filed together with a Request
    • by a resident/national of a PCT Contracting State
  – filed in one language
  – filed in one patent Office
    • the receiving Office (RO)
    • usually the applicant's home patent Office
  – treated as a national application
    • in each designated State as of the international filing date (IFD)

• Formalities in compliance with the PCT
  – must be accepted during national phase
Patent Law Treaties Implementation Act of 2012 (PLTIA) set forth provisions implementing the “Hague Agreement” which provides for international design applications filed through the USPTO. The provisions took effect on May 13th, 2015.

There are currently no provisions for PCT plant applications.
Finally...

- In addition to the US, the European Union and hundreds of countries around the world issue their own patents.
- Patents are issued according to the laws of the particular country, and are only enforceable in that country.
- There is no such thing as a world-wide patent.
Visit USPTO on the Web

www.USPTO.gov
Resources

- Utility Patent Application Guide:  
  www.uspto.gov/patents/resources/types/utility.jsp


- IP Awareness Assessment Tool:  

- Inventor resources:  www.uspto.gov/inventors/patents.jsp

- Micro Entity Limit:  www.uspto.gov/patents/law/micro_entity.jsp

- Pro Bono Program and video on patent process:  
  www.uspto.gov/inventors/proseprobono

- Law School Clinic Program:  
  www.uspto.gov/ip/boards/oed/practitioner/agents/law_school_pilot.jsp

- Comprehensive Training Material for First Inventor to File:  
  www.uspto.gov/aia_implementation/patents.jsp#heading-10
Direct Help

- **Elizabeth.dougherty@uspto.gov**

- **Email:** Innovationdevelopment@uspto.gov

- **Toll free phone number:** 1-866-767-3848  
  **or call:** 571-272-8877
Thank You!